

Revised

Join the fight...

against

BRUCELLOSIS



THE AGRICULTURAL AND MECHANICAL
COLLEGE OF TEXAS
TEXAS AGRICULTURAL EXTENSION SERVICE
J. E. Hutchison, Director, College Station, Texas

Join The Fight Against . . . **BRUCELLOSIS**

C. M. PATTERSON
EXTENSION VETERINARIAN
THE A&M COLLEGE OF TEXAS

CATTLE INFECTED with brucellosis suffer a 20 percent reduction in milk production. They calve on the average every 1½ years rather than yearly. In addition, the resulting abortions, sterility and difficult breeders increase replacement needs by 30 percent.

These losses apply to you, a beef cow that loses 20 percent of her milk production will wean a calf 10 percent lighter than normal.

Swine producers also stand to lose by this disease. Infected sows abort or give birth to weak litters. Sows frequently become sterile following abortion. The disease damages the bones of the spine, with resulting paralysis in up to 20 percent of infected swine.

Brucellosis is the most common cause of fistula of the withers in horses. It frequently is responsible for waterbags forming on knees of both horses and cattle.

Cases of brucellosis frequently occur among persons handling livestock or drinking unpasteurized milk. Human brucellosis is a lingering disease of the bloodstream. Although seldom fatal, it causes debility, nervous disorders and other physical disturbances.

Less tangible losses occur in addition to the ones listed. Loss of markets for Texas breeding and stocker cattle has become a serious problem. The shortage of healthy replacement stock is commanding attention. There is a constant threat of this disease becoming established in the sheep and goat flocks of Texas.

CAUSE OF BRUCELLOSIS

Brucellosis is a contagious disease caused by a specific kind of bacteria. In cattle, it has been called

Bang's disease. In swine it may be referred to as "contagious abortion." It sometimes is referred to as "undulant fever" in man.

The germ causing brucellosis is not a hardy individual and can not survive long outside the animal's body under Texas' climatic conditions. It spreads mainly from animal to animal through contaminated feed and water and through direct contact with infected animals having a discharge from the reproductive tract. Only in swine is the disease commonly transmitted by breeding.

Man becomes infected by drinking unpasteurized milk from diseased animals or by handling diseased animals without proper sanitary precautions. Assisting animals during birth or removing retained afterbirth is the most dangerous type of contact.

A BIG PROBLEM

During the summer of 1956, livestock sanitary officials in Texas ran a survey that gave the first concrete evidence that brucellosis was a problem of magnitude. Using the milk ring test, they found 79 percent of the 2,551 dairy herds surveyed showed evidence of the disease. Since that time, every graded dairy herd in the State has enrolled in a brucellosis control program. Present figures indicate a marked reduction among this class of cattle.

Although the same type of figures are not available for beef cattle herds, limited data available indicate that an average of one herd out of four in the State contains some brucellosis-infected animals. In all, probably more than 5 percent of Texas beef cattle carry the disease. However, in the South and western arid regions the infection rate is much lower, while in the humid eastern areas the infection rate may approach 20 percent in some counties.

As a result of this disease problem, marketing has become difficult. More than half of the counties in the United States are now Modified Certified Brucellosis areas. Another large group of counties are designated as brucellosis control areas and are engaged in county-wide, blood-testing programs. Counties in both categories have stringent rules covering animals coming into their counties from brucellosis-infected areas.

The extra expense of shipping Texas cattle to out-of-state markets occasioned by these restrictions results in a steadily declining market for our tremendous crop of stocker and feeder cattle. The majority of competition from western states already has achieved a Modified Certified status.

WHAT YOU CAN DO

The best solution to the brucellosis problem is a county-wide clearance of diseased cattle. This has been provided for in a law passed by the 56th Legislature. The law also provided an alternative for counties that have such a high infection rate as to create hardship on cattle producers if they entered immediately into an eradication program.

In brief the program is as follows:

Type I Brucellosis Control Area: (An area in which no testing is required, but in which the owner of cattle must have all female calves vaccinated at his own expense.) To be recognized, the vaccinations must be done in compliance with the Commission's regulations. Only vaccinations by authorized veterinarians and reported on approved forms within 10 days are to be considered official.

Vaccination of beef calves.

Animals must be between 4 and 12 months of age (inclusive).

Animals must be identified individually by:

Ear tattoo showing — month / V / last digit of year or vaccination, or "V" hot iron brand 3 inches in size, rightjaw, position to designate year vaccinated.

Vaccination of dairy calves.

Animals must be between 4 and 8 months of age (inclusive).

Animals must be identified individually by ear-tag, tattoo number or fire-brand.

Animals must have ear tattoo showing — month / V / last digit of year of vaccination.

Certificates on calves in graded dairy herds should be distributed as follows:

1 copy (original) to Livestock Sanitary Commission within 10 days

1 copy to cattle owner

1 copy to health officer of milkshed

1 copy to veterinarian.

Type II Brucellosis Control Area: All counties in Texas will be qualified to participate under the "Range and Semi-range Area" program. Area certification will be for 3 years.

Standards for area certification are:

Blood test of all dairy cattle, all purebred beef cattle and 20 percent of all other cattle in each herd over 3 years of age. Steers, spayed heifers and official vaccinates under 30 months of age excluded.

Certification results if not over 1 percent of the area cattle population (steers and spayed heifers excluded) in not more than 5 percent of the herds are found infected.

Infected herds will be quarantined until the entire herd passes one clean test not less than 120 days from the date all reactors were removed.

If tests reveal over 1 percent infection in cattle, but not more than 2 percent, retest of infected herds may certify the area if prescribed limits are met after these retests.

If the area test discloses more than 2 percent of the cattle infected, or if the retest of infected herds does not lower the infection rate to 1 percent of the cattle in 5 percent of the herds, a complete area retest of the required percentage in each herd will have to be made in the area.

Feed-lot cattle of any class may be exempt from test provided:

They are held under quarantine separate and apart from other cattle.

They are not to be held over 120 days.

They are sold for immediate slaughter, under permit from the Commission, at the end of this period.

Addition of cattle to control or certified areas:

Cattle from certified free herds, or negative herds in certified areas, can enter another certified area, or control area, if accompanied by an approved health certificate.

Official vaccinates under 30 months of age can enter such areas when suitably identified and approved by the Commission.

All other cattle must be negative to a blood test prior to entry, be held in quarantine at least 30 days, and be retested, with the following exceptions:

Cattle under 6 months of age

Steers, spayed heifers

Cattle intended for immediate slaughter

Movement of cattle within a control area:

Untested cattle cannot be moved from one premise to another, except as follows:

Official vaccinates under 30 months of age accompanied by certificate of vaccination and originating in a nonquarantined herd.

All other cattle negative to the blood test and originating in a nonquarantined herd, except as follows:

Calves under 6 months of age

Steers and spayed heifers

Cattle consigned to livestock sales which are under the supervision of the Texas Animal Health Commission

Cattle consigned to immediate slaughter

Cattle moved by their owner from one pasture to a contiguous pasture, also owned or controlled by him.

Cattle destined to points outside the area

Official vaccinates over 30 months of age that do not react more than incomplete at a dilution of 1: 200

Disposition of reactor cattle:

All reactors must be fire-branded with letter "B", reactor tag placed in ear, immediately isolated from other cattle, and sent to slaughter under permit within 15 days.

In hardship cases, reactors may be retained for 1 year provided:

Reactors are quarantined separate and apart from other cattle

All cattle on premise are tested at 6-month intervals, except:

Reactors

Calves under 6 months of age

Steers and spayed heifers

Official vaccinates under 30 months of age

Animals that have previously been disclosed as reactors are eligible for retest if request is made within 10 days.

REQUIREMENTS FOR AREA RE-CERTIFICATION

All herds that showed infection on the last certifying test, or have shown infection since, will be retested.

Twenty percent of the herds in the area, but not the same herds checked in the last re-certifying test, will be tested.

If the combined total number of reactors from the above two catagories does not exceed 1 percent of the area's cattle, but less than 2 percent, are found to be reactors, another test will be conducted on the infected herds within 120 days. If then the infection rate is down to 1 percent of the cattle in 5 percent of the herds, the area will be re-certified.

If an area does not qualify for re-certification, it must start over with the methods outlined in Standards for Area Certification.

DUTIES OF OWNERS AND CARETAKERS OF CATTLE

Must gather and present their cattle for test and vaccination

Must furnish labor and facilities to properly restrain cattle

Must permit the identification of reactor animals

STEPS TO FOLLOW IN YOUR HERD

Regardless of the type program your county may enter, if any, you should follow certain precautions to make control practices work efficiently in your herd.

If you are in an area where brucellosis is a problem, follow a calfhood vaccination program with your replacement animals.

Buy only officially vaccinated animals, or animals from clean herds, for replacements.

Keep fences in good repair to prevent wandering animals from introducing new infection.

Prevent spread of disease by protecting water and feed from contamination with body discharges of animals.

Put animals that don't shed their afterbirth into a hospital trap until normal. Test all animals that abort. Send infected ones to slaughter.

Encourage your neighbors to cooperate in the fight to eradicate brucellosis. Ask your county agent about procedures for organizing your county into a control area.

**Let's make Texas a Modified Certified
Brucellosis State by 1965!**